PERSONALITY FACTORS RELATED TO UNDERACHIEVEMENT IN COLLEGE FRESHMEN OF HIGH INTELLECTUAL ABILITY

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CHAPTER I

INTRODUCTION AND SURVEY OF LITERATURE

tors that are involved in the underachievement of people who have the intellectual ability to perform at a high level in college. Educators and clinical psychologists are continually concerned over students who fail to fulfill the promise of test scores of intellect. It is a fact that many students who come to universities, and who have the appropriate intellectual ability, do not succeed academically. Many are failed out or put on academic probation because of poor performance in their course work. Others voluntarily drop out before the first semester comes to a close because they realize they are going to make failing grades. Some are allowed to stay, and do stay, but make grades below the freehman average. Many of these students continue to make poor academic records throughout their college careers.

Why is it, that students who have the intellectual capacity to succeed in college, perform at such low levels? Realistically, there are many possible answers to this question. It is possible that the student has undergone extreme environmental pressures which make it difficult for him to put in enough study time. Personality factors also loom as likely answers to the above question. The term personality covers a multitude of factors. There is a large number of possible answers to the above question in this one area alone. One might ask

many questions, such as, does severity of emotional disorder differentiate achievers from nonachievers; is there a personality type which differentiates achievers from nonachievers; is there a certain psychodynamic pattern which differentiates achievers from nonachievers; and many more. All these questions will be touched on in some way in this study. The emphasis will be on the psychodynamics of achievers compared to nonachievers.

Some psychological clinics, which are associated with universities in some way, offer psychotherapeutic treatment to such underachieving students. Of course, only the students who come and ask for such treatment, or who are referred, get it. In some such cases the client's grades undergo a dramatic change. This would lead us to believe that, in at least a recognizable proportion of cases of underachievement, personality factors make a significant contribution. The present study is an attempt to investigate experimentally the contribution of such personality factors to underachievement by college freshmen who have the intellectual ability to succeed at the University of Florida.

The writer wishes to acknowledge that he understands personality as a configuration. He believes that isolated groups of specific traits may be used in describing personality but they have meaning only when the person is seen as a whole. An attempt is made to evaluate the person as a whole person and not to dissect his personality into parts or sections.

It is hoped that the information derived from the results of this study may be found useful in counseling students who are not functioning up to their intellectual level. There is also the long range possibility that this information may be used in detecting, ahead of time, the students who are likely to have academic difficulty and thus allow preventive action.

Previous studies of underachievers have generally found that psychometric data on personality have not significantly predicted the underachievers, or differentiated the underachievers from the achievers. The few studies which have found psychometric data to differentiate are inconsistent in their findings.

Jensen (11) gave the Minnesota Multiphasic Personality Inventory (MMPI) to freshmen at Brigham Young University. Using high school grades and the American Council on Education Psychological Test (ACE) as criteria he divided the subjects into four groups: achieving students of low ability, nonachieving students of low ability, achieving students of high ability, and nonachieving students of high ability. Jensen was most concerned with the first group mentioned. He compared the mean scores on the nine clinical scales of the MMPI between groups. He found that the latter two groups differed at the 5 per cent level of confidence on the Lie (L), Masculinity-femininity (Mf), and Paranoid (Pa) scales. Nonachievers of high ability made higher L scores but lower Mf and Pa scores. Frick (6) gave the MMPI to 267 college freshman girls. He correlated each MMPI scale with the ACE. Correlations ranged from -.20 to -.02, and all were minus. He also correlated the MMPI scales with grades and found that all correlations were minus except

for Pa which was in the positive direction and significant at the 5 per cent level of confidence. Other correlations found significant were the Hypochondriasis (Hs) scale at the 5 per cent level, and the Psychopathic deviate (Pd), Schizophrenic (Sc), and Hypomania (Ma) scales at the 1 per cent level. He found significantly better prediction of grades using the ACE and MMPI than predicting grades solely on the basis of the ACE. He concluded that emotional factors significantly effect performance at college. Stone and Ganung (18) administered the MMPI to 317 women freshmen. They divided them into two groups, normal, and those who made deviant scores on the MMPI. They found that there were more graduates in the normal than among those in the other group. This difference was significant at the 5 per cent level. The deviant group also had significantly lower grade point averages. The MMPI scales which made this differentiation most significantly were Depression (D), Hysteria (Hy), and especially Ma. Drake and Oetting (4) found in one study that the Mf scale may be measuring intellectual as well as personality variables. He found that the D scale was low in the profiles of students judged by their counselors as "lacking in academic motivation." He showed that the differentiating profile is one in which Sc and Ma are among the three highest scales and Social Introversion (Si) is among the lowest two scales. This was, however, found to be true only when Mf was also low.

In a later study Drake (5) administered the MMPI to 3,480 male college freshmen. In this group he found sixty-nine useable profiles which fit the above described pattern. This group, "lacking

academic motivation," differed at the .001 level in grades from the rest of the freshman class, grades being lower in this group. Since Mf had to be low also, he postulated that Mf was acting as a suppressor variable. The Mf scale was not significantly correlated with grades, so therefore, he concludes, does not predict scholarship by itself.

Assum and Levy (2) tested the significance of the difference between the grades of students who had come to a university psychological clinic asking for help and students who had not made contact with that clinic. They found no significant differences between these two groups on the ACE or on reading tests, but a difference at the 1 per cent level on grades. The grades of people who came to the clinic were significantly lower than the grades of people who had made no clinic contact.

Diener (3) differentiated two groups of college students, achievers and underachievers. He tested for significant differences on age, time spent in extracurricular activities, Kuder Preference Record, Edwards Personal Preference Schedule, Brown-Holtzman Survey of Study Habits and Attitudes, ACE, reading ability, high school grades, hours per week spent in studying, work for pay, class attendance, and place of residence. He found no significant differences, with but few showing trends.

Young (19) constructed instruments to test parent-child relationships, and found that freshman "achievement motivation" was not significantly influenced by the relationship of the subjects with

their parents.

Several workers have attempted to construct specific MMPT scales which would predict, or differentiate achievers from nonachievers. Quinn (16) correlated each MMPI item with the ACE and grade point averages of his subjects. He constructed one scale of those items that correlated significantly at the 1 per cent level with grades, and low with ACE. He constructed a larger scale of the items that correlated at the 5 per cent level with grades, and low with ACE. He then cross validated his scales on three additional freshman classes. Both scales, however, showed only a weak relationship with college achievement. Neither scale offered a significant increase in prediction. He concludes that MMPI scales are not worthwhile in trying to differentiate college achievers from nonachievers.

Altus (1) also attempted to construct a similar scale on the MMPI using a smaller N. He found no significant scale but states that he believes such a scale is feasible.

Meehl and Hathaway (15) demonstrated that the K scale is correlated with educational level. They also note that college students make higher K scores than the general population.

Another approach is to study underachieving students using mainly clinical evidence and not relying on psychometric data as the major measure. Sarnof and Raphael (17) intensively studied five students who came to the attention of the Dean's office for failure. They interviewed them weekly for most of their second semester. They also administered to them the Kuder Preference Record, ACE, and Michigan

Sentence Completion Test. They reported their results as five complete case studies.

Case A scored at the 97 percentile rank on the AGE. He earned a poor academic record. He was suggestible, immature, naïve, and felt inferior to his brother. He seemed afraid to try for fear of failure.

Case B earned a 41 percentile rank on the ACE and was impulsive, egocentric, showed a low tolerance for frustration. His father suffered a heart attack during the first semester.

Case C earned a 99 percentile rank on the ACE. He was involved in many extracurricular activities, showed a psychopathic trend, flatness of affect, immaturity, and engaged in many escapist activities.

Case D scored at the 29 percentile rank on the ACE. He seemed insecure, shy, passive, immature, and had many tensions with his roommates.

Case E scored at the 78 percentile rank on the ACE. He was schizoid, harbored deep-seated hostilities toward his mother and step-father, and seemed to resist passively his parents by academic underachievement. He had difficulty studying because of his ubiquitous hostile fantasies.

The above case studies indicate a multicausality for failure, show that crisis situations may be important. All were judged as very immature, and rebellion against parental authority is sometimes expressed by resistance to study.

These studies suggest the need for a study which combines both clinical and psychometric data on a large number of people. The present

study is an attempt to combine psychometric data and clinical information in order to understand the psychodynamic patterns underlying underachievement. The hypothesis being tested is stated in general terms.

This hypothesis is as follows:

Hypothesis: There are discernible psychodynamics underlying underachievement in college of students with high intellectual ability.

CHAPTER II

EXPERIMENTAL DESIGN

Subjects

The subjects were drawn from the entering freshman class at the University of Florida in the fall of 1958. Classes began in September, and the subjects were selected the following November. At this time most had had the first round of progress tests and many had had at least some of the second round of progress tests. All of these freshmen had been given the college ACE during orientation week, the week just prior to the beginning of classes. The records of the group of students who earned a percentile rank of 90 or better on the ACE total were separated from the rest of the freshman class. This is a 90 percentile rank on local norms which are slightly higher than national norms. There were 27h freshmen in this group.

The writer then, with the use of the Registrar's records, formed a selected group from among those people in the first group who had made a 29 percentile rank or less on any one, or more, of their progress tests. There were seventy-seven members in this group. The object of selecting people who had made a 29 percentile rank or lower on any one progress test was to insure the selection of a group of people with high ACE scores, many of whom would not likely make high grades at the end of the semester. It is assumed that all in

this group have the intellectual ability to perform at a satisfactory level at the University of Florida.

In the group of seventy-seven, two people dropped out of school before the close of the semester. One of these two was not available for use as a subject, having left the school. The second person returned the second semester and was interviewed and tested at that time. As no grades were available for the first semester for this person, she was not included in the statistical handling of the data but is considered in the clinical report.

Another two subjects completed the first semester but were dropped from the University for their poor academic performance before they could be contacted as subjects in this study. Both were contacted and asked to complete the checklist and to write, in as much detail as possible, the reasons that they believe lie behind their failure at the University. They were also asked to write something of their background. One of the two replied. The one who replied is considered separately in the clinical report. The other was listed as unavailable as a subject.

One in the group refused entirely to participate in the study for personal reasons. He was asked to participate, but his insistent refusal was honored on the belief that a person has the right to disclose only what personal information he wishes. He too was considered unavailable as a subject. Another of the subjects took the MMPI and then refused to come for the clinical interview. As the data on this subject were incomplete he was not included in the statistical analysis

but he is taken up in the clinical report.

It was not possible to contact one other subject after extensive effort. The writer did interview his roommates, and this information is treated in the clinical report.

A total of seven subjects was unavailable regarding the statistical analysis due to no, or incomplete, information. Of these seven, some information is available on four. They are discussed separately. This left an N of 70 in the group which was analyzed statistically.

Procedure

Each person of this group was sent a letter asking him only to appear at a specified place and time to participate as a subject in a research study. The subjects met in groups ranging from twenty-six to twelve people due to practical considerations. Some had to be contacted as many as five times before they appeared though most attended the first group to which they were invited. At these group meetings the subjects were told only that the experiment involved taking a test and being interviewed. They were left as naive as possible prior to the end of the clinical interview. They were told that the study would be explained at that time. Individual appointments were then arranged with the writer on the basis of one hour per interview. The booklet form of the MMPI was administered to each of the groups.

A checklist (see Appendix A) was devised to obtain the subjects' report on certain variables which logically would seem to differentiate students who do well academically from those who do poorly academically. This checklist was filled in by the subject at the end

of the interview.

A rating scale (see Appendix B), for the interviewer's use, was also constructed. The items on this rating scale were selected as the writer felt they might well be variables which would differentiate achievers and underachievers. This rating scale was filled out by the interviewer at the end of the interview on the basis of his clinical impressions of the subject.

During the interview the interviewer, who was the same person in all cases, took extensive notes on what was said. He also jotted down his clinical impressions and any outstanding personality characteristics of the subject. An attempt was made to understand the personality dynamics functioning in each subject from this interview. No standardized or rigid procedure was used in the interviews. The interviewer, rather, felt his way along according to his own feelings and clinical understandings. The interviewer asked few direct questions and generally let the subject choose his own direction. At times specific questions were called for. The subjects were, for example, usually asked to tell the interviewer something of their families. At the time of the interview the interviewer knew nothing of the results of the

After the interview the MMPI's were scored twice by two different people as a check on the accuracy of the scoring. The only three disagreements were rechecked by a third scoring. Profiles were then drawn up for the nine clinical scales, the L scale, the F scale, and the K scale. The question mark scale was not used, as all but one subject answered every item, and in this case the score of 23 was just

below the mean. The T scores on each scale for each subject were recorded. These T scores were used in the statistical analysis as they are compatible scales and the raw scores are not. The T scores were taken after the correction for K.

Only after the interview was completed, and the MMPI's scored, were the grades for the first semester obtained. The writer acknowledges the fact that there is not a one-to-one relationship between grades and achievement. Grades are, however, the best indicator of achievement available and so were chosen to represent achievement in this study. As is customary at the University of Florida, quantification of grades is accomplished by dividing the number of hours carried into the honor points earned. Honor points are assigned on the basis of four points for an A, three points for a B, two points for a C, one point for a D, and zero points for an E. The distribution of honor point averages for this group of people approaches the shape of the normal curve with a slight accumulation of cases below the mean. Of this group of people of high intellectual ability, thirty-seven made HPA's of less than C. This is 53 per cent of the total group.

The results of the twelfth grade Cooperative General Achievement Tests were obtained from the Office of the Registrar. The Cooperative General Achievement Tests (Co-op tests), and the high school ACE are given to all high school seniors in the State of Florida. The Co-op tests and the high school ACE comprise the placement test series.

The quantitative data in this study were the HPA, placement test total, number of hours carried, all the items of the checklist,

all the items of the rating scale, the 13 MMPI variables, and a coding for the selected pattern of courses taken. These data were punched into Hollerith cards. The services of the Statistical Laboratory at the University of Florida were employed. Programs for intercorrelations on the IBM 650 computer were available only for a 30 variable problem. It was decided to do preliminary statistical work using the IBM 082 sorter. The deck of cards was divided into the upper, lower, and middle thirds on the basis of HPA. Then the upper and lower thirds were individually run through the sorter, sorting on the punches in other columns according to the choice of the operator. In this manner the distribution of the people in the upper third of HPA's was compared to the distribution of the people in the lower third of HPA's on each of the 55 variables. In this manner it was found that the distributions were identical or very similar on 26 of the variables and that 29 of the variables looked worth subjecting to more refined statistical handling. These 29 variables, along with HPA, were programmed and run through the IBM 650 computer for intercorrelations, means, and standard deviations. The remaining 26 variables were discarded as not differentiating between the achievers and underachievers on the basis of inspection of the results obtained with the sorter.

The interview material and MMPI profiles were arranged in rank order according to HPA. A case summary was extracted on the top sixteen subjects and on the bottom sixteen subjects. These case summaries are the results of the clinical interpretation of all the information available on each subject and are attempts to describe the most

important psychodynamic aspects of each person. There was no attempt here to subject this material to quantitative analysis. The writer believes that this kind of information is not amenable to the methods of quantification available at present. The distinction between subjective and subjectivism is important at this point. Subjective data are data arrived at by description or interpretation and are not amenable to analysis into numbers. Subjectivism refers to the interpretation of observations based solely on the personal distortions of the interpreter. These two cannot be clearly distinguished from each other in any concrete way. It is hoped in this study that the clinical data are more in the class of data labeled subjective, and that little subjectivism is involved.

Generalizations are drawn on the basis of similarities and differences among the cases of students who made the sixteen lowest HPA's and similarities and differences among the cases of students who made the sixteen highest HPA's. These two groups were also compared.

CHAPTER III

RESULTS

Statistical Findings

On the basis of the preliminary statistical work, the following 30 variables were selected for more refined statistical analysis as they appeared most promising: the 13 MMPI variables, the 10 rating scale variables, HPA, high school placement test total, question number 13 on the checklist and the explanation following this question, the items "hobbies" and "doing things alone" from the checklist, and the item on the highest school grade reached by the subject's mother. All other items were disregarded as they showed no significant differences between the people making high honor point averages and the people making low honor point averages.

with the use of the IRM 650 computer 435 Pearson product moment correlation coefficients were computed. These were the intercorrelations of the selected 30 variables mentioned above. These correlation coefficients ranged from .900 to .000. This study does not concern itself with all of the obtained correlations, i.e. correlations between MMPI scales. The range of correlation coefficients with which this study is concerned was from .600 to .000.

There were 73 of the 435 correlation coefficients significantly different from zero at the 1 per cent level of confidence and 45 significantly different from zero at the 5 per cent level of confidence.

This study is not concerned with all of these correlations either. Of the correlations of importance in this research there were 29 significantly different from zero at the 1 per cent level of confidence, and 19 significantly different from zero at the 5 per cent level of confidence. Many of the significant correlation coefficients in the total group were between MMPI scales. This study does not concern itself with these correlations. This study does concern itself with the correlations between honor point average and other variables, intercorrelations between rating scale items, correlations between rating scale items and checklist items.

ables correlate significantly with HPA. The only correlation coefficient significantly different from zero at the 1 per cent level of confidence was between HPA and high school placement test total. Of the variables correlated, placement test total is the best single predictor of HPA. Even though this correlation is significant at the 1 per cent level of confidence it is low in terms of predictability. When r is .317 there is 95 per cent of the variance unaccounted for. It is reasonable that students who do well on achievement tests at the high school level are also by and large the students who do well their freshman year in college. In a selected sample of this nature, this is noteworthy.

The only other variable statistically significant, this at the 5 per cent level, was HPA with the item on the rating scale, severity

TABLE 1

PEARSON PRODUCT MOMENT CORRELATION COEFFICIENTS
BETWEEN HPA AND OTHER VARIABLES

•	V	ariables	Correlation	Level of Significance
HPA	with	crisis situation	.012	not significant
HPA	81	reason for crisis	045	11
HPA	Ħ	F scale	.043	28
HPA	11	K "	117	11
HPA	11	L "	162	11
HPA	11	Hs "	.001	11
HPA	11	D "	•065	19
HPA	11	Hy "	.043	11
HPA	11	Pd "	.119	21
HPA	91	Mf "	.014	91
HPA	16	Pa "	•099	71
HPA	71	Pt "	.024	11
HPA	17	Sc "	.146	11
HPA	Ħ	Ma "	.002	98
HPA	n	MMPI total	•095	m
HPA	#1	anxiety level	019	76
HPA	11	expression of hostility	.052	17
HPA	11	type of defenses	008	11
HPA	11	feelings of inadequacy	074	91
HPA	11	resistance to parents	044	11
HPA	11	dependency	033	91
HPA	11	severity of the problem	271	5% level
HPA	11	how socialized	016	not significant
HPA	11	need for social acceptance	e068	21
HPA	11	doing things alone	172	11
HPA	61	relates interpersonally	.183	11
HPA	tt	hobbies	102	17
HPA	99	placement test total	.317	1% level

of problems. This correlation being significant suggests that severity of emotional disturbance might be a factor in highly intelligent students doing poorly at college. The more generally disturbed a person is the more difficult it is for him to produce at a college level, even though he has the necessary intellectual ability.

The inter-item correlations of the rating scale are presented in Table 2. Manifest anxiety level is correlated, significantly different from zero, with how well a person relates interpersonally (1 per cent level), with the severity of psychological problems (1 per cent level), and with how socialized the student is (5 per cent level). The more anxious the student, the less well he related interpersonally, and the more severe were his problems. The more anxious he was the less socialized he was.

The student's manner of expressing his hostilities, from passively to openly, did not correlate significantly with any of the other items on the rating scale.

The student's characteristic defenses, on a continuum from hysterical through intellectualizing, correlated significantly (5 per cent level) with the degree to which dependency is a problem. It appears here that the more hysterical the student the more apt he is to experience dependency needs as a problem.

The degree to which feelings of inadequacy are a problem correlated significantly with resistance to parents (1 per cent level), with the degree to which dependency is a problem (1 per cent level), with the severity of his psychological problems (1 per cent

TABLE 2

PEARSON PRODUCT MOMENT CORRELATION COEFFICIENTS
BETWEEN RATING SCALE ITEMS

-					
		1	2	3	4
l.	Manifest anxiety level.		.106	003	.189
2.	Expression of hostility (passively to openly).			060	.093
	Defenses (intellectual- izing to hysterical).				• 1 40
١.	Feelings of inadequacy a problem.				
•	Resistance to parents a problem.				
•	Relates interpersonally.				
	Dependency a problem.		•		
•	Severity of psychological problems.				
9.	How socialized is he?				
	Need for social acceptance.				

a 5% level of significance

b 1% level of significance

TABLE 2-Continued

5	6	7	8	9	10
.1 43	381b	.039	,411b	235	.074
.026	204	003	.223	159	.013
.033	.208	.278a	.079	•094	.091
.433b	295a	•420ъ	•502b	196	.418b
	256a	•581b	•600ъ	189	•232
		118	602b	46بليا.	.112
			•502b	.100	.153
				401b	•084
					.125

level), with his need for social acceptance (1 per cent level), and negatively with how well the student relates (5 per cent level). Resistance to parents would imply difficulties with parents and probably many of the same difficulties which cause a person to resist also contribute to his feelings of inadequacy, the severity of his psychological problems, and his needs for social acceptance. Dependency needs may be one of the basic problems these students had with their parents. As we would expect, the less adequate the student felt the less able was he to relate in an interpersonal situation.

The degree to which the student was resisting his parents correlated significantly with the degree to which dependency is a problem with him (1 per cent level), with the severity of his psychological problems (1 per cent level), and negatively with how well he related in an interpersonal situation (5 per cent level). Not having been able to work through a dependent relationship with one's parents and struggling with these dependency needs is a major way of resisting parents. On this theoretical basis we would expect a high correlation here. The same struggle, resisting parents, is sometimes a disturbing conflict so we would expect a high correlation with severity of psychological problems. The more an individual was resisting his parents the less well he related interpersonally.

As we would expect, the less well an individual was able to relate the more severe were his psychological problems. The better he was able to relate interpersonally the more socialized he was.

We would expect that the more dependent an individual, the

more severe would be his psychological problems, these variables correlated at the 1 per cent level. Dependency needs may be a basic psychological problem.

Severity of psychological problems was correlated significantly at the 1 per cent level with how socialized the person was. We would guess that severely disturbed people would have fewer and poorer social relationships than well-adjusted people. This is confirmed by the negative correlation.

Other significant correlations of interest are discussed in the next few paragraphs; see Table 3.

The F scale on the MMPI correlated significantly at the 1 per cent level with feelings of inadequacy as a psychological problem, the degree of resistance to parents, the degree to which dependency is a problem, and the severity of psychological problems. We would expect severity of problems and the F scale to correlate significantly as we know that severely disturbed people earn significantly higher F scale scores than well-adjusted people.

The F scale is a group of items that are rarely answered by people. A high F scale may indicate misunderstanding the directions or a person who is very confused. If the higher F scores in this study indicate confusion then we would expect the significant correlations with inadequacy as a problem, resistance to parents, and dependency as these contribute to conflict and confusion. The F scale correlated significantly at the 5 per cent level with how socialized the student was. Confused and disturbed students socialize less than well-organized students.

TABLE 3

PEARSON PRODUCT MOMENT CORRELATION COEFFICIENTS
BETWEEN MMPI SCALES AND RATING SCALE ITEMS

-087 -097 -253a -204		3	4	77	9	7	80	6	10
Nd 108 Nt 202 Na 138 Pt 293a Sc 161 Ma 129 Total 213	015 015 015 015 015 015 015 015 015 015	163 128 128 128 128 128 128 128	371b 066 066 016 018 200 200 200 200 200 200 200 200 200 20	230 230 230 230 235 235 235 235 235 235 235 235 235 235	1176 1133 1045 1045 1043 1086 1186	351b 102 102 109 254a 058 383b 139 139 346b	388b 168 168 154 306a 373b 373b	235a 260a 263a 080 080 085 065 065 069 110	020 110 100 100 100 100 100 100 100 100

a 5% level of significance

b 1% level of significance

The K scale correlated significantly (5 per cent level) only with the degree to which the student was socializing. There is a relationship between being the kind of person who socializes and having a defensive test-taking attitude.

The hypochondriasis scale on the MMPI correlated significantly (5 per cent level) with the rating scale item on manifest anxiety level. The more use of hypochondriacal defenses the more manifest anxiety was shown by the student.

The D scale on the MMPI correlated significantly (5 per cent level) with resistance to parents, severity of psychological problems, the degree to which the student was socializing, and how well he was able to relate in an interpersonal situation. If we take the D scale to represent hostility, anxiety, guilt, and general upset and disturbance of a neurotic nature as well as depression then we would expect a significant correlation between D and severity of problems, D and how socialized a person is, and D and how well a person relates interpersonally. A high D score also seems to indicate in some degree difficulties between the person and his parents.

The Pd scale correlated significantly with degree of dependency (5 per cent level) and with degree of resistance to parents (1 per cent level). We would expect a high correlation between the degree of resistance to parents and the Pd scale. Psychopathic people react against the superego structure derived mainly from their parents. Due to the aloofness of the person with a decided psychopathic trend in personality we would expect an alienation of dependency problems, yet Pd and dependency are significantly correlated. Possibly this represents a group of people who have a psychopathic trend in their personalities but who are not pathologically psychopathic and who maintain enough superego function to be dependent. One interpretation might be that extreme dependency underlies the psychopathic trend.

The Pt scale correlated at the 5 per cent level with degree of anxiety, degree inadequate feelings are a problem, and resistance to parents. It is theoretically consistent that people who make high Pt scores are anxious and feel inadequate. Many of these problems originate in the person's relationship with his parents which would account for the correlation between Pt and resistance to parents. The Pt scale also correlated significantly at the 1 per cent level with degree of severity of problems. The psychasthenic scale measures obsessive-compulsive behavior, intellectualizing, and general disturbance.

The Pa scale correlated significantly at the 1 per cent level with resistance to parents, degree of dependency, and severity of problems. People who resist their parents, yet are dependent and fairly disturbed, also tend to have a paranoid trend in their personalities.

The Sc scale correlated at the 1 per cent level with degree of inadequacy, resistance to parents, degree of dependency, and severity of problems. As a high score on the schizophrenic scale indicates a relatively disturbed individual we would expect the above correlations.

The total of the T scores on the MMPI clinical scales excluding Mf correlated significantly with degree of inadequacy (5 per cent level), resistance to parents (1 per cent level), degree of dependency

(1 per cent level), and severity of problems (1 per cent level). The MMPT total score is sometimes considered as a general measure of degree of pathological deviation. It is far from pure because of the canceling out effects of high and low scales. The above correlations are understandable and even expected if the MMPT total is a general measure of adjustment.

The correlations between MMPI scales and rating scale items are summarized in Table 3.

As seen in Table 4, the checklist item on "time spent doing things alone" correlated significantly with resistance to parents (5 per cent level), degree of dependency (5 per cent level), and severity of problems (5 per cent level). People who are dependent, resist their parents, and are fairly disturbed, tend to spend more time by themselves away from interpersonal relationships. Also the time spent with hobbies correlated significantly at the 5 per cent level with severity of problems and with need for social acceptance. People who are very dependent sometimes attach this dependency to a hobby that is less threatening to them than people.

All other correlations were statistically not significant or not at all relevant to this research.

As Hathaway and Meehl (10) report, the Ma scale on the MMPI of college students was generally higher than with a non-college population. On 31 of the 72 MMPI profiles the Ma scale was the highest single scale. This is 43 per cent. No theoretical explanation is offered by Hathaway and Meehl and none by the present author.

TABLE 4
SIGNIFICANT CORRELATIONS BETWEEN RATING
SCALE ITEMS AND CHECKLIST ITEMS

Rating Scale	r	Checklist					
Resistance to parents	.291a	Time	spent	doing	things	alone	
Degree of dependency	.288a	n	Ħ	Ħ	n	91	
Severity of problems	.252a	ñ	11	51	Ħ	n	
Degree of dependency	-377b	9	rime s	pent i	n hobbie	98	

a 5% level of significance

b 1% level of significance

Clinical Findings

The evidence of a clinical nature is enlightening on the issue of the underlying psychodynamics of highly intelligent people who do poorly in their first semester at college. Case studies were drawn up on those people who made the sixteen lowest HPA's and on the people who made the sixteen highest HPA's. These will be presented individually. In formulating the case study the writer has attempted to use all the information available to him and arrive at a picture of basic psychodynamics rather than comparing these people on a pinpointed, atomized basis. This resulting picture of the person is presented rather than factual material.

In order of HPA beginning with the lowest, the following are the case summaries of those sixteen people making the lowest HPA's.

The basic dynamics and characterization of the subject was done immediately following the interview, before the interviewer had knowledge of the subject's MMPI or grades. The final case summaries were prepared using all available information about the subjects.

These final summaries are presented here.

Case A: This case may be out of sequence. This person dropped out of school during the first semester in order to avoid extremely low grades. She may be described as a hostile person who mainly directs this hostility toward men. She spent almost the entire interview talking about her hostilities toward her parents. She is not, however, at all able to express these hostilities openly for fear of her parents rejection. She can only express these

resentments indirectly though she is aware of them. Because she is in touch with her feelings and with reality her MMPI profile is rather healthy looking. Successful performance in college is very important to her parents. She passively resists her parents and expresses her hostilities for them by performing poorly in college.

Case B: This is a very dependent, defensive, intellectualized, and constricted person. He feels alienated from his father and is very frightened by anything representing authority. He has a need to be accepted socially which sometimes prevents him from studying. He lacks self-confidence and has developed some counterphobic defenses. A great deal of his energy is spent in strivings for independence, away from authority. College represents authority and dependency which puts him in the middle of his conflict here at college. The ensuing threat causes his intellectual functioning to be highly constricted.

Case C: This person is suffering from psychological problems of long standing. He is a cold, rigid person whose intellectualizing defenses keep him from experiencing any warm interpersonal relationships. He cannot express his real feelings in any warm way. He has no insight or understanding into his own difficulties. He is an over controlled and socially inept person. He is a very tight, rigid person who cannot loosen up enough to produce in a flexible and constructive way.

Case D: This person is somewhat washed-out emotionally. She needs to please her parents as a cover-up for some deep-seated hostile

feelings which are completely unacceptable to her. She is dependent and cannot accept responsibility. She also has needs for social acceptance which along with her dependency and wishy-washiness make her very suggestible. Friends pull her along into social events. These dynamics keep her from studying, which in turn fulfills her social needs, and allow her very indirectly to express her hostilities for her parents by not producing in college.

Case E: This person is very dependent and tied to her home, especially her mother. She tries to break away and fights this struggle very intensely but completely denies it. She has a marked passive-aggressive orientation toward life. Depression is about her only neurotic defense. Education is very important to her father toward whom she must express her resentments in her own passive-aggressive manner. The passive-aggressive expression of hostility is marked and characteristic of her entire personality. This is mainly in relation to her father and her need to have his love while at the same time she feels she doesn't receive it and harbors deep resentments over this.

Case F: This is a highly anxious and hostile person who is able to express little warmth for people. He is always angry. He has a history of having been completely rejected by his entire family all his life and very much needs acceptance. He continually lets himself be swayed by others hoping to be accepted by them by so doing. He is, at the same time, afraid of not being wanted, so rejects people before they have the chance to reject him. He consequently

receives little warmth from people and gives none, but constantly hopes to get warmth. He has no insight into his difficulties and denies problems. As he is constantly seeking social acceptance he spends a great deal of time trying to get near to people, but never accomplishes it, and so has little time left to study.

Case G: This person was very immature and showed little spontaneity in the interview. When she was young she was often ill and developed many hysterical conversion and hypochondriacal defenses. She uses denial as a defense along with naïvete. She is terribly afraid of failure so uses her hypochondriacal and conversion symptoms as an excuse for doing poorly at college. There is a basic insecurity here.

Case H: This is a fairly disturbed person. His father is a loud, hostile, and threatening person. He has developed in an opposite fashion from his father. He has little-girlish mannerisms, is immature, feminine, dependent, and passive. He can express his hostile feelings only passively. He also harbors a deep hostility for his father. This looks like a basic passive-aggressive personality problem of long standing with schizoid features. He expresses his hostility for his parents indirectly by doing poorly in college. The schizoid confusion in his thinking also contributes to his poor college performance.

Case I: This person was tense and anxious in the interview situation. He is effeminate and feels awkward socially. He is not a very sensitive person. There is an almost classical psychopathic history of exploitation and manipulation of people. His MMPI looks

like a fairly disturbed profile. There are decided difficulties around values. He does not readily accept social values, including values on education. He has a psychopathic unconcern regarding college and education.

Case J: This person shows evidence of psychopathic characteristics from present dynamics, history, and MMPI. He has no close relationships and has little sensitivity in interpersonal situations. His hostilities are open and accepted. He has never developed a sound superego and feels very little guilt over his open aggressive acts. He acts out his hostilities and readily accepts this behavior in himself. Having an incheate superego he is not able to discern what is of value and what is not. This makes his performance in college very difficult.

Case K: This is a fairly disturbed person. He is constantly fighting to be a man and to be masculine. At the same time he feels great ambivalence for his father. His struggle then becomes one of trying to be like his father and at the same time trying to get away from the father by resisting him. He is resisting a dominating and rejecting father and at the same time longs for his acceptance. This conflict arouses many hostile and confusing feelings in him. There is a slight schizoid trend also. He cannot express his hostility for his father directly as this would then alienate his father and this would be too threatening. All the confusion in his feeling and thinking make studying very difficult for him.

Case L: This is an intellectualized, controlled, and somewhat

effeminate person. He has good defenses that work well for him. His parents rejected him as a child. He has developed an intense need for social acceptance and spends a great deal of time seeking acceptance and recognition. He became very involved in a social extracurricular activity during the first semester which left him very little time to study. The need for social acceptance is much greater than his felt need for an education.

Case M: This is a very tense, rigid, rationalized person. He is a fairly disturbed person. There is a decided paranoid trend here with projection being a major defensive measure. His relationships with his parents are disturbed. A basic conflict within him is his struggle with masculinity and sexual identification. He is basically identified with his mother and fights this, struggling to be a man. He has strong ambivalent feelings for his father and at times finds it difficult to identify with his father. His father very much wants him to complete college. College symbolizes masculinity to him and so college represents his problems. He struggles with college work as he struggles with the masculine role.

Case N: This person is very affected, sarcastic, dependent and has intense status needs. He fights for his mother's love and feels he is in competition with his brother. He strongly resents the father and denies this. He has deep feelings of inadequacy. He is quite tied to his mother but in many ways attempts to break away from her. He cannot express his hostilities, instead turns them on himself, (he reports he has an ulcer) or expresses them indirectly.

His low grades in college upset his mother. He makes low grades in college as an expression of the hostility which results from his frustrated needs for nurturance.

Gase 0: This is a fairly disturbed person. He is shy and feels inadequate. He has a great deal of free-floating anxiety and feelings of being upset. In some ways his background is the background of a spoiled child. His parents decided for him that he would come to the University of Florida. He has many defenses and is using them all extensively. He has periods of depression accompanied by anxiety. He also uses hypochondriacal defenses and has hysterical headaches. His major defenses are rigid, intellectualizing ones.

None of these defenses are able to control his anxieties and he remains upset, anxious, and confused. He is used to having things done for him and yet is reacting against authority. This combination of factors makes it very difficult for him to produce in college.

Case P: This person is affected, has many peculiar effeminate mannerisms, and is very immature. He is highly identified with the female figure and is struggling with a basic conflict. At times he acts little-girlish. His defenses are denial, repression, and naivete, at times he is histrionic. As a child he was overindulged and feels lost and anxious on his own away from home. He would be very nappy to return home to his mother's waiting arms. Making low grades is one way to do this.

The following are the case summaries of the people who made the rimmen highest HPA's from the highest on down.

Case 1: This person is somewhat passive and slightly dependent but not pathologically passive-aggressive or passive-dependent. He is pleasant, affable, and capable of deep interpersonal warmth. He is somewhat tied to home and sometimes has some difficulty in asserting himself. Basically this case study is normal. He has good ego function, is integrated, and expresses much warmth in his interpersonal relationships.

Case 2: This is a dominating and controlling person. He is basically identified with his father and has conflicting feelings for his mother. He uses both hysterical and intellectualizing defenses. He is fairly dependent, and fights these needs in himself. He does however have a great deal of insight and understanding into his problems. He has a strong ego. He is somewhat compulsive and is compulsively driven to achieve in college. There is a sound basic personality organization here.

Case 3: This person has had some problems in her interpersonal relationships at college. She is quite tied to her parents, and her whole family. She is, however, very much aware of this and accepts it and thinks it is good. She does not fight her ties to her family. She has a very realistic view of being at college away from home. She produces at college in order to please her parents. There is expression of warmth and a basic acceptance of self here. This case study is mainly normal.

Case h: This is a very disturbed person with highly developed intellectualizing defenses. He is a tense, amxious, cold, and ungiving

person. He is very threatened by people and avoids interpersonal situations as much as possible. He is insecure and frightened by authority. His reaction to authority is, however, passive rather than fighting back against it. He keeps away from people at college, and exercises his intellectualizing defenses at the same time by spending much time studying. He is held together with his kind of defenses well enough to retain what he reads in a relatively undistorted way.

Case 5: This is a warm, affable person who relates well in an interpersonal situation. She is a mature individual. She feels closer to her father than to her mother, knows this, and accepts it. She can realistically express her feelings for her parents. Inferiority feelings are somewhat of a problem for her but her strong ego deals with this easily. She enters interpersonal relationships easily. This case study is basically normal.

Case 6: This person is friendly and somewhat passive. In new relationships she is at first somewhat guarded and defensive but soon loosens up and is more able to express warmth. Just below the level of awareness is a great deal of resentment for her father. There is a subclinical schizoid trend here but she retains her warmth and ability to relate. There is a good ego functioning here.

Case 7: This person is dependent and psychologically tied to home even though she has broken with home to get married. She cannot express her hostilities very well as they are threatening to her. She does not have deep-seated resentments of long standing

though her primary defenses are hysterical ones. Basically, this case study is normal and none of the above mentioned characteristics are extreme.

Case 8: This is a highly intellectualized, cold and rigid person. She gives the impression of being a strong, unyielding person. She has intense status needs and needs for personal and social recognition. She sees her parents as inadequate and inferior. She needs to rise above them. She is satisfying this need by doing well in college. In a sense this is a way of resisting her parents by attempting to become better than they are. Other than this the case is normal.

Case 9: This person has many of the adolescent's problems. She is experiencing an adolescent rebellion against her father. Her father is compulsive and she is somewhat freely disorganized in her living. She is conscious of this conflict with her father and accepts it. She does have a strong ego. She also resists her father by doing well in a field of her own choice rather than in the field he chose for her. Over-all, she looks well-adjusted with a strong ego.

Case 10: This person is somewhat immature, tense and intellectualized. He relates well interpersonally. He has good, but not rigid, defenses. Success in college represents a higher social level which is very attractive to him. This case is basically normal.

Case 11: This is a rather disturbed person. She is a very masculine girl who is highly identified with her father and harbors deep-seated hostility for her mother. She sees herself as competing with her mother for her father's love. She sees herself as the loser.

She is anxious and hostile. She expresses her hostilities openly and accepts them in herself. Her problems are very near the surface and cause her much anxiety. By doing well in school she greatly pleases her father, who, in turn, highly praises her for this performance.

Case 12: This person relates well and is able to experience and express much interpersonal warmth. He is a little flat and color-less in his expression at times, but this does not last very long.

Occasionally he feels inadequate, but this is not much of a problem for him. Basically this case is normal.

Case 13: This is a very disturbed person. He is very effeminate and highly identified with his mother. He very much needs social acceptance, but is not a very socialized person. He has a great deal of hostility for his parents that permeates his entire personality. He resists his parents openly, but underneath he is very dependent. These problems are very near the surface and keep him tense and anxious. He tries very hard to do well in college in order to please his mother, but his anxieties will not let him function at the peak of his capabilities. While he did fairly well due to his hard work he has the capability to do even better.

Case list This person presents a rather cold front but is capable of experiencing warmth. There is a decided psychopathic trend here. He also utilizes many neurotic defenses such as depression, intellectualizing, and denial. He remains organized and integrated at this point while many of his problems are not pressing at this time.

Case 15: This is a happy, pleasant, warm, well-integrated person. She tends to react passively to authority. She is slightly naive in her approach to life. She relates well interpersonally. Basically this case is normal.

Case 16: This person appears bored and passive. He fears authority. He tends to pull away from people and shows little spontaneity in interpersonal relationships. He has little intellectual curiosity. He does have the basic organization and control to study and produce. These problems are of a character nature and are not accompanied by a great deal of anxiety. He is not resisting his parents.

In addition to these thirty-two case studies, certain other cases require comment.

One subject the writer was not able to contact, because he refused to answer any correspondence and because his roommates in the dormitories had informally refused to allow him to stay in his room. Their stated reasons for this, obtained in an interview, were: he refused to wash, change his sheets, go to his classes, or do any of the things necessary to get along with roommates in a dormitory setting. There was also a report that this subject was in trouble with the local authorities. By reports, he is a chronic braggart and liar, and was de-pledged from a fraternity.

Another subject came to the group meeting, took the Minnesota Multiphasic Personality Inventory, but then refused to come to the individual interview. His Minnesota Multiphasic Personality Inventory

profile shows peaks on D and Pd; but these scales fall just within the normal range. The pattern is one of mild disturbance. This is not enough evidence on which to base conclusions.

One of the two students who left school and were contacted by mail replied. The one striking fact in this reply is that this is a person who was very young, and came to the University by being encouraged to skip his senior year in high school.

Examining the over-all view of the case summaries some generalizations can be drawn.

In the lower sixteen summaries there appears a preponderance of relatively disturbed people. In this group many of the individuals are people whose psychological problems are of long standing and are of a character nature. In six of these cases we find a passive-aggressive orientation and an inability to directly express hostility toward their parents. Accompanying this is a deep-seated resentment for the parents and the stress on subjects' grades by the parents.

In two of the lower sixteen cases there is a psychopathic element of not being able to distinguish what is of value. In each of the remaining cases there is a psychodynamic understanding of the student's poor college performance, but these are individualized.

In the upper sixteen case summaries there is evidence for more interpersonal warmth in the group as a whole. There are some very disturbed people in this group however. In each case of a disturbed person there is an understandable psychodynamic pattern operating which makes the highly successful college performance of the

individual involved just as neurotic as the poor performance of the individuals in the lower group. It becomes clear that there are neurotic motivations behind some individuals who are pushed to achieve at high levels. The degree of ego strength seems higher in the higher group than in the lower group. The basic character structure is more integrated and organized in the higher group.

CHAPTER IV

CONCLUSIONS

The only statistically significant correlations between HPA and other variables were with placement test total (1 per cent level) and severity of psychological problems (5 per cent level). No scale of the MMPI correlated significantly with HPA. In this group of highly intelligent students the placement test total was the best single predictor of HPA. While this correlation is statistically significant, it is small and leaves 95 per cent of the variance unaccounted for. Therefore, prediction on this basis would have a high degree of error in the selection of high ability groups. This group of subjects is relatively homogeneous, which may act as a constriction on the correlations. The Psychometric devices used in this study and those in past studies all have been found to be inadequate in predicting which students will underachieve in college. From the case summary results we see that there are some very disturbed people in the group of students who do well. The psychometric tests do not differentiate these disturbed people from the people who are disturbed and do poorly. The clinical interview did offer promise of differentiating the people who do well academically from the people who do poorly academically. One reason psychometric devices do not differentiate those who do well and those who do poorly is that

there are disturbed people who do well in college for highly neurotic reasons. The clinical interview which takes into account each person as a whole functioning person has promise for an understanding of these underlying problems. In drawing up a case summary the individual motives and dynamics take on meaning and importance in relation to the other motives and dynamics within the individual.

The rating scale items, individually, did not differentiate those students who do well from those students who do poorly in college. This, as an attempt to isolate specific factors, was not successful. The rating scale item on severity of psychological problems did, however, correlate significantly with HPA at the 5 per cent level of confidence. This item is the most generalized item on the rating scale.

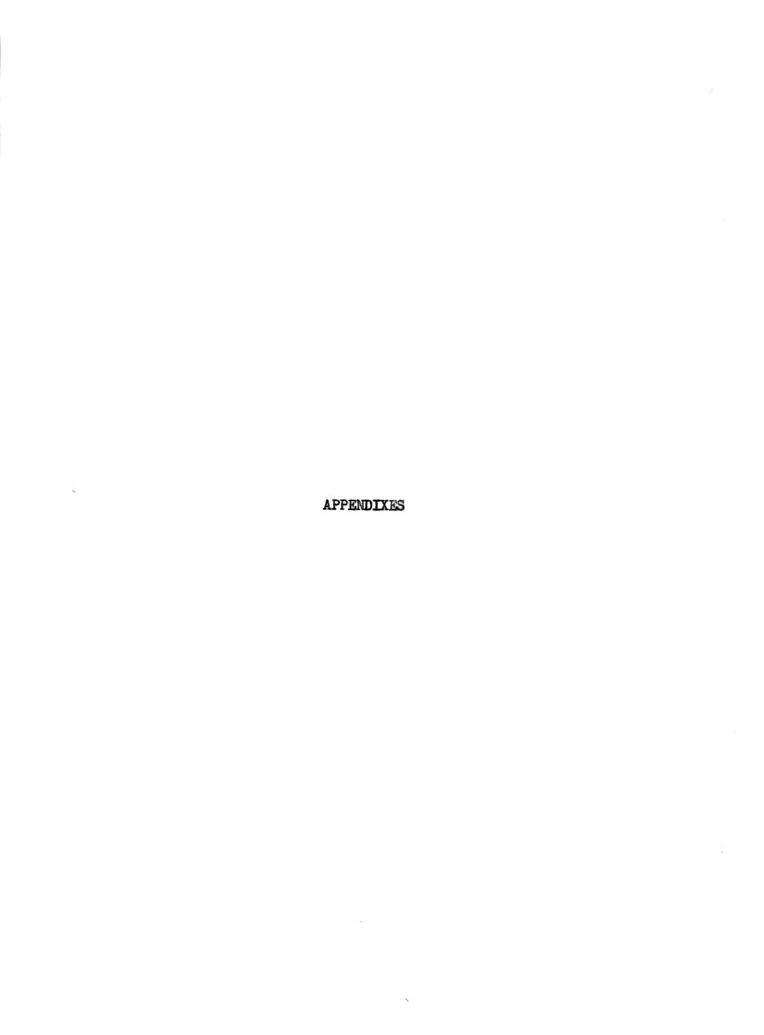
People do poorly in college work for different reasons. These reasons are understandable when viewed in terms of the person involved. These differences cancel each other in psychometric techniques. A person might score high on item A of a rating scale and the characteristic behind this might underlie his poor performance in college. Another person might score low on item A but high on item B and the characteristic behind this might underlie his poor performance in college. Both items A and B would not correlate significantly with academic performance at college, yet in each case the poor performance would be understandable when viewed as phrased in the following question: "what does this performance level mean to this person?" A person's performance in college is just another aspect of how this

person deals with his environment.

This point of view raises the question; "are there any similarities between people who underachieve that are unique to that group and that would allow for prediction of college performance in advance?"

People who have achieved at a high level in the past are, by and large, the same people who achieve at college. There is generally more emotional disturbance, in terms of severity, in underachievers than in those who achieve at a high level. This disturbance is more of a character nature than the disturbances in the group of people who perform up to their level of ability. People who perform at their level of ability show more interpersonal warmth, are more in touch with their feelings. There may be highly neurotic reasons for a person's high performance level in college just as in another person's poor performance. People with high ability who perform at high achievement levels in college show more ego strength as a group than do people who underachieve. The psychological problems of high achievers seem less ingrained in the character structure of the individuals than the psychological problems of people who underachieve.

There are clinically understandable psychodynamics underlying the underachieving college student of high intellectual ability.



APPENDIX A

CHECKLIST

FILL-OUT FORM AT END OF INTERVIEW

Pl	ease answer the following as accurately and as quickly as you can.
1.	I live:dorms,frat/sor. house,off-campus,home.
2.	I am: single, married, divorced, widow, separated.
3.	My parents are:married,divorced,separated.
4.	There have been, or are, difficulties between my parents in the: past, present, both past and present, neither.
5.	My parents: told me what vocational objective to prepare for, encouraged me to prepare for a particular vocational objective, discussed this with me but showed no preference, don't care what I major in .
6.	I: belong to a frat., wasn't asked to pledge a frat., am pledging a frat., was rushed but didn't pledge, don't care about frat. (social fraternities only).
7.	I feel closer to my:mother,father,some other member of my family,a person not a relative.
8.	I have: many friends, some friends, few friends, no friends.
9.	I'm sure of the vocational goal I presently have, I think I know what vocation I want to pursue but might change my mind, I'm not at all sure of a specific vocational goal but know the major area of my interests, I have no idea where my interests lie.
0.	I have: dropped courses, added courses, both dropped and added courses, neither dropped nor added courses.

What were your alternatives to coming to the University?					
Father	s occupation:				
	r father went in school: 's occupation:				
How fa	r mother went in school:				
1 . / .					
during					
during If yes	rl friend, unusual family difficulties, etc.) in your l the fall semester?				
during If yes	briefly identify what: te in hours per week the time you spend in: Socializing Studying				
during If yes	the fall semester?				
during If yes	the fall semester?				
during If yes	the fall semester?				
during If yes	the fall semester?				

APPENDIX B

RATING SCALE

CLINICAL JUDGMENTS

1.	Manifest anxiety level:						
	1	2	3	4	5		
2.	Expression of hostility:						
I	l passiv	2 ely	3	4	5 openly		
3.	Defenses:						
	l ntell rigid		3	4	5 hysterical (flexible)		
4.	Feelings of inadequacy a problem:						
	1	2	3	4	5		
5.	Resistance to parents a problem:						
	1	2	3	4	5		
6.	Relates interpersonally:						
	1	. 2	3	4	5		
7.	Dependency a problem:						
	1	2	3	4	5		
8.	Severity of psychological problems:						
	1	2	3	4	5		
9.	How socialized is he?:						
	1	2	3	4	5		

10. Need for social acceptance:

1 2 3 4 5

1 - lowest
5 - highest

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BIOGRAPHICAL ITEMS

Rahe Bassett Corlis was born in Cincinnati, Ohio, on August 30, 1933. He attended public schools there until the age of eight at which time his family moved to Melbourne, Florida. He graduated from Melbourne High School in June, 1951. He entered the University of Florida the same month and received the Bachelor of Arts degree with a major in psychology in June, 1955. He continued at the Univering the Graduate School and obtained a Master of Arts degree with a psychology major in January, 1957. His future plans are to work at the Columbus Psychiatric Clinic in Columbus, Ohio.

This dissertation was prepared under the direction of the chairman of the candidate's supervisory committee and has been approved by all members of the committee. It was submitted to the Dean of the College of Arts and Sciences and to the Graduate Council and was approved as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

January 30, 1960

Dean, College of Arts and Sciences

Dean, Graduate School

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